Dehydroepiandrosterone (DHEA) is an endogenous steroid hormone produced in the adrenal glands, gonads, and brain; it is an intermediate in the synthesis of estrogens and androgens. DHEA exhibits neuroprotective, cognition enhancing, anti-androgenic, anticancer, anti-metastatic, antiepileptic/anticonvulsant, anti-asthma, antacid, and anti-ulcerative activities. DHEA enhances working memory and cognition in clinical settings. DHEA acts as a partial agonist at androgen receptors and ERα receptors, as a full agonist at ERβ receptors, NMDA receptors, and σ1 receptors, and an antagonist at GABA-A receptors. Additionally, DHEA binds PPARα, pregnane X receptors (PXRs), and CXRs. In cellular models of cervical cancer, DHEA inhibits cell proliferation, migration, and adhesion. This compound’s antiepileptic activity potentially occurs through increasing expression of various glutamate transporters. In bronchial epithelial cells, DHEA inhibits the epithelial-to-mesenchymal transition (EMT), decreases levels of α-SMA, and increases levels of E-cadherin; it also displays bronchodilatory benefit in vivo. In other animal models, this compound decreases gastric acid secretion, lipid peroxidation, and ulcer formation.

References


Caution: This product is intended for laboratory and research use only. It is not for human or drug use.